

A microfluidic device is provided that comprises: a substrate; and a plurality of microvolumes at least partially defined by the substrate, each microvolume comprising a first submicrovolume and a second submicrovolume that is in fluid communication with the first submicrovolume when the device is rotated, the plurality of microvolumes being arranged in the device such that fluid in the first submicrovolumes of multiple of the microvolumes are transported to second submicrovolumes of the associated microvolumes when the device is rotated.